

ABSTRACT

A system for providing a mechanical and electrical connection between the ends of two essentially-coaxial shafts (1 and 2), whereby each shaft end comprises a groove (11, 12) close to an axial end extension (17 and 8; 18 and 9). Moreover, the aforementioned ends are connected inside a sleeve (10) including the following: a first annular shoulder (13) having a shape that is complementary to that of the groove of the first shaft, such that there is no clearance therebetween; a second annular shoulder (14) having a shape that is complementary to that of the groove (12) of the second shaft, but with a clearance therebetween; and a cavity (16) which is intended to receive the shaft ends, said cavity having an axial height which is greater than the sum of the axial heights of the axial end extensions (17 and 8; 18 and 9). Further, the axial end extensions (17 and 8; 18 and 9) of the two shafts are in permanent mechanical and electrical contact via an elastic conducting means (7).